



Australian Government

Department of Climate Change, Energy,
the Environment and Water
Australian Antarctic Division

AAD STANDARD OPERATING PROCEDURE OPERATIONS MANUAL

Volume 5B – RPAS standard operating procedures - Vessel at Sea 2026-2027

*This volume sets out the minimum requirements for conducting **remotely piloted aircraft (RPA)** operations **from a vessel at sea**. It is a vessel-specific supplement to **Operations Manual Volume 5A** and must be applied alongside Volume 5A's baseline governance, approvals, operating rules, and reporting requirements.*



Freespace Callisto 50 operating from the RSV Nuyina in the Derwent Estuary during V-trials, 2024. (photo Doug Thost).

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Revision history

Version	Date	Summary of changes	Approved by
V1.0	May 2026 Doug Thost	Initial release.	GM Antarctic Operations Branch

Quick Reference Checklist

- **Confirm governance and approvals:** operations must meet the requirements of *Operations Manual Volume 5A* (RPAS SOP) and be conducted under a valid CASA ReOC with appropriately qualified remote pilots (RePL or as otherwise approved).
- **High Seas limitation:** operations outside Australian territorial waters (>12 NM) may be restricted. Treat any High Seas operation as **non-standard** and confirm CASA/AAD governance approval before planning (refer Volume 5A).
- **Before voyage / pre-season:** confirm environmental authorisation/permit (as required), dangerous goods (battery) transport and storage arrangements, required communications methods (bridge–helideck), and a voyage **RPA Plan** (roles, aircraft types, go/no-go criteria including ship motion limits).
- **Before each flight period:** complete and authorise an RORA, confirm deconfliction with crewed aircraft (no concurrent helicopter operations; apply the 0.75 NM exclusion zone when helicopters are active), and brief bridge/IR/HLO communications and any sterile-bridge constraints.
- **Launch/recovery on a moving deck:** expect higher workload; use lowest-autonomy/manual modes as required, maintain battery reserve for recovery, and use a deck-position caller where practicable (Section 9.6).
- **After operations:** complete post-flight checks, logs, and required reporting (including AVCRM where applicable) and provide post-voyage feedback to improve this SOP (Sections 10–11).

Throughout this volume:

- **must / must not** = mandatory requirement/prohibition
- **should** = recommended best practice
- **may** = optional/possible

Acronyms

Acronym	Meaning	Acronym	Meaning
AAD	Australian Antarctic Division	EVLOS	Extended Visual Line of Sight
AAP	Australian Antarctic Program	GC	Ground Control
AAT	Australian Antarctic Territory	HLO	Helicopter Landing Officer
AER	AAD Antarctic & Environmental Regulation	IMDG	International Maritime Dangerous Goods (Code)
AVCRM	Aviation Compliance Risk Management software	IR	Integrated Rating
BCC	Battery Charging Container	LiPo	Lithium Polymer
BMS	Battery Monitoring System	NOTAM	Notice to Airmen
BoM	Bureau of Meteorology	OOW	Officer of the Watch
BVLOS	Beyond Visual Line of Sight	PPE	Personal Protective Equipment
CASA	Civil Aviation Safety Authority	ReOC	Remotely Piloted Aircraft Operator's Certificate
CASR	Civil Aviation Safety Regulations	RePL	Remote Pilot Licence
CRP	DCCEEW Chief Remote Pilot	RF	Radio frequency
DCCEEW	Department of Climate Change, Energy, the Environment and Water	RORA	RPA Operational Risk Assessment
DCRP	DCCEEW (AAD) Deputy Chief Remote Pilot	RPA/RPAS	Remotely Piloted Aircraft / System
DP	Dynamic Positioning	RSV	Research and Supply Vessel
eCon	AAD electronic consignment system	VLOS	Visual Line of Sight
		VOX	Voice Operated Exchange
		VL	Voyage Leader

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1 Introduction

This volume is organised around how vessel-based operations are conducted: pre-season planning (roles, approvals and logistics), pre-departure preparations (including dangerous goods and battery management), transit checks, pre-deployment readiness, shipboard communications and deconfliction, then launch/recovery and post-deployment reporting.

1. This SOP sets out minimum requirements for remotely piloted aircraft (RPA) operations supporting science, operational and media activities from a vessel at sea. While intended specifically for operations from the RSV *Nuyina*, the procedures are generally applicable to any charter vessel supporting the Australian Antarctic Program.
2. This SOP assumes that the baseline requirements of *Operations Manual Volume 5A* can be met. Refer to Volume 5A for detailed governance, approvals, operating rules and reporting requirements for RPA operations within the Australian Antarctic Program (AAP).
3. Recreational (model aircraft) flights are not permitted from an AAD/AAP chartered vessel at sea.
4. Operations on the High Seas (outside Australian territorial waters, >12 NM) may be restricted. Refer to Section 1.3 and *Operations Manual Volume 5A* and confirm applicable CASA and AAD governance requirements before planning any such operation.

1.2 Scope and relationship to Volume 5A

This volume provides additional vessel-at-sea requirements that sit alongside *Operations Manual Volume 5A* (RPAS standard operating procedures). It does not replace Volume 5A.

- **Volume 5B covers:** vessel-specific risks and controls (e.g., moving deck/heave and wind effects), shipboard communications and command lines (bridge–IR/HLO–RP team), helideck access control, lithium battery storage/charging arrangements onboard, and coordination with helicopter/flight deck operations.
- **Volume 5A continues to govern:** overall RPAS governance and approvals, roles and responsibilities, pre-deployment and local approvals (including RORA requirements), baseline operating rules and limitations (e.g., VLOS/EVLOS/BVLOS approvals, separation distances, weather minima), reporting/records, environmental requirements, and incident/occurrence reporting.
- **Where there is a conflict:** apply the more conservative requirement, and seek guidance/approval through AAD aviation governance contacts (as per Volume 5A) before proceeding.

1.3 Operations on the High Seas

Australia claims a large portion of East Antarctica; although this claim is “frozen” under the 1959 Antarctic Treaty, Australian aviation laws—including the Civil Aviation Act 1988 and associated rules—still apply within the Australian Antarctic Territory and its territorial waters (12 nautical miles from shore).

Beyond these waters lies the High Seas, where ICAO’s Annex 2 – Rules of the Air apply. The Australian Attorney-General’s Department (Office of International Law) advised in July 2023 that Australian aircraft—including RPAs—operating over the High Seas must meet both Annex 2 requirements and the relevant articles of the Chicago Convention listed below, where applicable.

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- Article 8 (Pilotless aircraft)
 - Article 12 (Rules of the air)
 - Article 20 (Display of marks)
 - Article 29 (Documents carried in aircraft)
 - Article 31 (Certificates of airworthiness)
 - Article 34 (Journey log books)

CASA will consider operations on the High Seas on a case-by-case basis, subject to compliance with the ICAO requirements. DCCEEW OCRP is working closely with CASA to determine RPA vehicle modifications and documentation required to potentially operate outside the 12NM limit from Australian Territory.

2 Pre-season

Prior to the shipping season, operational matters must be discussed with all parties to determine requirements and expectations. Ensure that:

1. Project support and environmental permits are confirmed (refer to Volume 5A).
2. Storage and transport of dangerous goods (DGs) must comply with shipping requirements. Rechargeable Li-ion or Li-polymer batteries are Class 9 Miscellaneous DGs. Wanted On Voyage (WOV) cargo is classified as cargo under the IMDG Code and batteries must be transported in approved packaging. Operators must check with cargo@aad.gov.au to confirm compliance.
3. Existing SOPs, risk assessments and JHAs must not conflict with this SOP. Approval must be obtained from the AAD Director of Aviation for any proposed variation from AAD Operations Manual Volume 5A – RPAS standard operating procedures.
4. Remote pilots must have a minimum of 10 hours on the type of RPA they propose to operate, and for flights from a ship at sea, a minimum of 10 hours in manual (lowest autonomy) mode.
5. The proposed operation type (VLOS, EVLOS, BVLOS or a combination) and the RPA category to be used must be clearly understood, noting that operational complexity increases with RPA category and may require multi-crew operations (e.g., hand-held remote control versus complex ground control station).
6. Communications between the bridge and helideck/operations area must be suitable for the proposed operation (e.g., Bluetooth, UHF or marine VHF).
7. Where video systems are required between the RPA and bridge/operations area, they must be able to be established and maintained. Any cabling must be secured and approved, protected from damage, and clearly marked.
8. Proposed frequencies for command and control of the RPA must not conflict with any existing ship RF systems.
9. An **RPA Plan** must be developed for the Voyage Management Team (VMT) covering personnel involved and their experience (addressing requirements of AAD Volume 5A), RPA

types to be used (including environmental limitations, go/no-go criteria including estimates for pitch, heave, roll and sway), and project (SLA) requirements/tasks.

Note that:

10. Systems checks and trial deployments may be possible during pre-season trial voyages.

3 Pre-departure: General

1. Pre-consignment RPA IMU calibration must be completed before embarkation (as this may not be possible on a moving platform). The RPA type to be used must be suitable for operation from a moving platform and must be able to arm while the ship is rolling, pitching, heaving and swaying. Not all RPA will be able to arm under these conditions.
2. Cargo must be consigned in accordance with AAD eCon cargo regulations and shipping schedule timeframes.
3. AAD Operations Manual Volume 5A – RPAS standard operating procedures must be reviewed prior to departure.
4. All operations must be conducted under a CASA-issued ReOC and must be approved by the ReOC holder's Chief Remote Pilot (CRP) or delegate. Any CASA permissions required for non-standard operations (e.g., BVLOS) must be obtained. Evidence of approvals must be available for presentation to the VMT as part of the RORA process.
5. A meeting involving (as applicable) representatives from AAD Shipping, AAD Aviation, Serco and Voyage Management must be held to confirm the following approvals and permits are in place:
 - a. AAD Operations approval (SLA);
 - b. AAD Antarctic & Environmental Regulation (AER) authorisation/permit (as required); and
 - c. Project expectations must be discussed and agreed.

4 Lithium Polymer (LiPo) Battery Management

4.1 General

1. Specific information relating to LiPo batteries **must** be provided as part of the eCon process. A current (i.e., published within the previous 5 years) Safety Data Sheet **must** be available for circulation. Battery chemistry **must** be known and approved for ship use.
2. Battery transport cases must be labelled "WARM STORE: DO NOT FREEZE".
3. Ideally batteries should be stored in a temperature-controlled environment maintained at 20–25 °C. Depending on battery size (measured in Wh), storage within the ship's dedicated battery storage locations may not be possible. Recent voyages (e.g., HIMI V1 & V2 2025–26) have embarked a dedicated lab space (modified shipping container: Battery Charging Container (BCC)) for storage and charging of Li-ion batteries.
4. Battery charging stations must be secured to bench space to prevent movement during normal sea state.

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5. Batteries must not be charged in the BCC during periods when access to external decks is restricted.
 6. BCC power use should be closely monitored when multiple battery charging stations are operating.
 7. A battery maintenance schedule must be in place and used during the voyage, recording battery charging parameters before and after charging.
 8. Non-BMS equipped batteries must be charged in a fire-proof container (e.g., Zarges K470 battery box) or in an area designated by Marine Operational Planning/Serco, with a smoke/heat detector active in the area. Only OEM-approved chargers will be used for the batteries.
 9. The bridge must be notified (as required) when charging operations begin and end, and RPA personnel must be on a watch cycle during charging. Batteries must be monitored by personnel for temperature and any physical change during the charging period (typically 1–2 hours depending on battery capacity and charge rate).
 10. Batteries must not be charged at rates greater than 1C. For 40 Ah batteries, the charge rate must be less than 0.5C (20 A).
 11. If a battery displays signs of instability during charging, the box must be closed, disconnected from the charger, and removed from the storage area to an external deck for monitoring or, if directed by the ship, disposal at sea.
 12. Batteries must be stored in a secure, shock-proof container. Batteries should not be stored fully charged for periods exceeding three days. When not in use, batteries should be stored at approximately 50% charge (3.6–3.9 V per cell). During transport, batteries must be stored at ≤30% charge.
 13. During operations, batteries must be transferred from the storage container to the RPA assembly/flight area in approved OEM hard cases (shock-proof, thermal protection) or a suitable alternative (e.g., Zarges K470 battery box).
 14. Unless required by an approved battery management protocol, batteries should not be drained below 20% during flights, in accordance with the OEM-approved flight manual.

4.2 Storage of damaged or defective batteries

Batteries must be retired if:

1. Battery temperature exceeds 60 °C after flight.
2. There is evidence of swelling.
3. Performance diminishes (as identified through the maintenance schedule).
4. Retired batteries must be stored/transported in an appropriately labelled fire-proof Zarges K470 battery box, rated for the safe storage and transport of defective or damaged lithium batteries (in accordance with ADR P908 (EU) and SV 376 (Bavaria)).

4.3 Fire safety

1. Smoke detectors must be present in the storage/charging area.
2. Fire blankets must be available.
3. An appropriate fire extinguisher must be available for a LiPo fire.

NOTE: Immediate actions in the event of fire must be containment (e.g., close the door) and raising the alarm (notify the bridge). RPA personnel must not attempt to fight a fire at sea unless directed as part of the vessel's emergency response procedures.

5 Pre-departure: RPA specific Ship's Induction

1. Overall RPA operations (including LiPo battery recharging) must be reviewed with the vessel.
2. A walk-through with the Master (or delegate) of designated RPAS areas (e.g., workshop, helicopter hangar, RPAS shipping containers and helideck) must be conducted to identify any issues.
3. A meeting with the Master and relevant officers must be held to walk through the LiPo battery recharging process and inspect the charging area and associated hazard controls.

6 During Transit

1. Equipment stowage must be routinely inspected during transit.
2. In accordance with the IMDG Code and standard RPA industry Li-ion battery management practice, all batteries must be discharged to transport level (<30%), with terminals protected, and batteries placed in secure containers.
3. Voyage Management, nominated ship's crew and the RPA team should meet during transit to review voyage-specific aspects of the planned RPA operations. A senior Drone Coordinator should be nominated to be the single point-of-contact for all RPA-related enquiries. The Drone Coordinator must be prepared to present details regarding operational specifics on all RPA types to be used on the voyage, including capabilities and environmental limitations. This presentation will form the basis of the RORA and alert the crew to any potential ship-specific requirements of the planned operations.

7 Pre-deployment

1. Three levels of RPA operational readiness are:
 - a. No operations;
 - b. Standby for Operations; and
 - c. Active operations.
2. The RPA team leader must attend daily briefings with the VL to assess potential requirement for RPA operations relative to ice conditions and the weather forecast. If RPA operations are potentially required/possible, the status level is **Standby**.
3. The RPA team must use **Standby** to prepare all aspects of RPA operations, including completion of pre-deployment checklists as far as practicable:
 - a. A RPA Operational Risk Assessment (RORA) must be completed (AAD VL or delegate and ship's representative as required). The RPA team must submit a flight plan detailing the operational area and mission objectives, go/no-go criteria, and the maximum height and distance to be flown from the vessel.
 - b. The RPA checklist must be completed as far as practicable prior to deployment.
 - c. Batteries must be fully charged and pre-warmed (as applicable).

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- d. Sensors/cameras must be prepared (e.g., batteries, data cards, cleanliness).
 - e. Recovery equipment must be fitted where required (e.g., flotation).
 - f. Compass calibration must be completed where required. If compass calibration is not possible due to high latitude, the mission must be flown in ATTI/Stabilize (manual/lowest autonomy) mode and the risk assessment must be reviewed. Note: many late model RPA use dual GNSS antennas to provide heading information, negating the need for compass calibration.
 - g. Other role equipment must be ready as required (e.g., communications equipment).

Note: Given the operational conditions can be limited in Antarctica and the sub-Antarctic, it is important to get **Standby** preparations right.

4. When status is **Active** (an identified time window is imminent or has arrived and the weather is within limits), a pre-flight safety meeting must be convened on the bridge with all rostered members of the RPA team, together with the Officer of the Watch (OOW) and duty Integrated Rating (IR). The flight plan must be reviewed.

8 Air Traffic Control

8.1 Communications

1. If RPA operations will take place within 10 NM of an Antarctic base or another ship, Common Traffic Advisory Frequency (CTAF) protocols must be followed. This may entail a Notice to Airmen (NOTAM) being relayed (e.g., by email or phone/radio call) to the base or ship 7 days to 24 hours in advance, and a radio call on 129.7 MHz (Antarctic multicom) 10 minutes in advance of operations with 15–30 minute updates (as required) during operations.
2. 10 minutes prior: In preparation for launch, a warning announcement must be broadcast on Marine Ch 16 and VHF 129.7 MHz (or other frequency as required).

e.g., “All traffic in the vicinity of LAT/LONG, unmanned multirotor flight operations are commencing from research vessel RSV *Nuyina* within 0.5 NM of the vessel, not above 400 feet, all traffic in the vicinity of LAT/LONG.” A listening watch should be maintained on VHF 129.7 MHz for any area traffic.

8.2 Deconfliction with Crewed Aircraft

1. Concurrent RPA and helicopter operations on the vessel are not permitted. When helicopters are operating from the *Nuyina*, a 0.75 NM radius RPA exclusion zone applies.
2. RPA operations must not be conducted when a helicopter is parked on the helideck unless explicitly authorised by the Master and included in the RORA/risk assessment.
3. RPA and helicopter operations may be conducted sequentially.

9 Deployment

9.1 Ship Positioning

The ship’s position relative to wind and swell should be considered when planning RPA flight operations.

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1. In open water and low swell, the vessel should be positioned into wind to provide lee protection for helideck launch and recovery, where practicable. This may or may not be desirable depending on the turbulence generated by the ship's superstructure.
 2. If into-wind positioning is not possible or practicable, the RPA pilot must modify launch and recovery procedures to account for crosswind or following-wind launch.
 3. In sea ice, the vessel may drift with wind from any direction. The RPA pilot must assess where on the ship launch and recovery can be achieved safely. This is nearly always the helideck, although other locations (e.g., forward cargo hatch covers, if clear) may be considered during planning.

Where practicable, launch and recovery should be conducted from an open clear space such as the helideck.

9.2 Helideck Preparation

1. Depending on conditions and specific RPA operations, there may be a need to clear some of the helideck of snow/ice (RSV *Nuyina* helideck is heated). The heli-hangar itself is a useful staging area, with the option of keeping the doors closed to keep equipment warm before use.
2. In general, the entire helideck should be available for RPA operations; however, this is at the discretion of the pilot and/or Voyage Management/Master. Deck access must be restricted to personnel involved in the RPA operations by roping off access routes and stairwells, as required. This is the responsibility of the assigned IR and must be covered during the pre-operational brief.

9.3 Personal Protective Equipment

1. All personnel associated with the RPA operations must wear appropriate PPE: specifically, full arm and leg cover and suitable for the work environment (i.e cold weather/sun protection) , sunglasses/eye protection. A helmet is mandated for RPA in the medium category and above.
2. Because RPA operations often involve looking directly upwards, helmets should be fitted with chin straps.
3. Helmets should incorporate communications headsets for the pilot, with a preference for voice activated (VOX) or open-comms (e.g., Bluetooth) boom microphones to enable hands-free operation.

9.4 Observers

Observers must not be present on external operational decks unless explicitly authorised by the OOW and the RPA team prior to operations. Authorised observers must wear appropriate PPE, be briefed on procedures for an RPA crash on the vessel, and be briefed on any AAD-specific requirements relating to the acquisition and transmission of imagery and video footage of RPA operations.

9.5 Lines of Communication during vessel-based RPA operations

1. Clear lines of communication that minimise potential distraction to both the Pilot and Ground Control members of the RPA team, as well as the bridge, are very important. The ship will assign one IR (generally) to RPA tasks of low complexity.
2. The IR is responsible for communications with the bridge and can relay relevant information to the RPA team either (on the RPA team's behalf) to or from the bridge. During some manoeuvres, the bridge will declare a "sterile bridge" and will not be available for direct comms with the IR/RPA team.
3. The following communication line should be used:
RPA Pilot (RP) ← → Ground Control (GC) ← → IR/HLO/Bridge
4. The RP and GC should perform redundancy checks on each other's equipment. The GC should work through pre-flight checklists with the RP using a check/respond method. The RP must advise the GC when ready. The GC must notify the IR/HLO, who must check in with the bridge.
5. Clearance to begin the mission must be confirmed from the bridge via the HLO, to the GC and finally the RP. Given the short duration of RPA flights, once clearance is given it is generally assumed to remain in effect for multiple cycles of take-off, landing, battery change and re-launch, unless otherwise directed. Take-offs and landings must be reported if required by the Master.
6. The RP must call out 'ARMING' before arming the RPA. Depending on conditions and equipment, a ground run (or low hover) of up to 2 minutes may be required to ensure batteries are at optimal operating temperature (note: some batteries can be triggered to self-warm prior to placement in the aircraft).
7. The RP must call out 'LIFTING' or 'TAKING OFF' when beginning the flight.
8. The RP and GC must communicate directly during operations. The GC should provide updates on battery levels, telemetry, mission length and environmental conditions, allowing the RP to focus on flying the RPA. The GC may operate the camera payload (for example).
9. Any significant change in meteorological conditions must be relayed from the bridge to the IR/HLO.

9.6 VTOL Take-off & Landing

1. Taking off, and particularly landing on a moving vessel increases the pilot workload which could result in accidents, particularly if the RPA is not designed with ship operations in mind. It is not possible to practice at-sea operations involving ship heave and roll without actually being in those conditions.
2. The decision to operate with the ship making way should be considered carefully and discussed with the Master well in advance of operations. RPA operations should normally be conducted with the ship stationary (or in DP mode). Review RPA automation settings carefully (particularly automated Return To Home settings) if the ship is making way.
3. Ship motion due to swell (roll, pitch, heave, sway) must be considered. For take-off, waiting until the deck is at the top of heave is best practice.
4. A heaving deck presents challenges to the pilot when committing to the actual touchdown, and the RPA autopilot may not detect contact with the deck as a signal to land, delaying the

command to shut-down (many DJI RPA may remain armed unless the throttle is held fully down for 5 seconds. Ardupilot-based RPA may be disarmed by ground crew on a companion PC running UgCS, QGC or Mission Planner using the disarm function on landing).

5. For this reason, landing should be conducted in the lowest autonomy/manual modes to prevent tip-over (due to sway and the RPA attempting to maintain geographic position). The pilot should be prepared to wait for a period of relative calm to attempt landing and should plan sufficient battery reserve for recovery (approximately 25% in moderate heave conditions).
6. The pilot should maintain sufficient height to ensure a rising deck does not impact a hovering RPA. This relative motion can be optically unsettling; pilots with no at-sea experience should take their time on landing and should not undertake initial operations in heave conditions exceeding 1.5 m.
7. When conducting a landing, the RPA should be positioned as close as practicable to the ship's centreline to minimise roll, and as close as practicable to the ship's midpoint (i.e. the forward portion of the helideck) to minimise pitch.
8. Where practicable, a member of the ground crew should be positioned behind the pilot to relay deck position (e.g., "top of heave; moving down; bottom of heave; steady").
9. Some RPA are designed with automated ship motion take-off and landing functionality (e.g., DJI M400; Freespace Operations Chappie for Callisto). Where such systems are used, the RPA team must discuss all aspects of the automation with AAD Aviation prior to deployment and use.

9.7 RPA Recovery following ditching

A ditched RPA is usually a lost RPA. Any recovery operation must be assessed against ship time lost and operational risk, and a decision must be made by the Voyage Leader and Master as to whether recovery is possible and whether the benefit outweighs the risk. If recovery is possible or is explicitly required by a permit, there are two main methods of recovery following an off-ship ditching:

1. For open water flights, the RPA may need to be fitted with a flotation device. Where recovery is attempted, it should preferably be conducted by launching the FRC/IRB. The Master must determine whether sea/ice/swell/wind conditions are suitable for FRC/IRB operations.
2. In sea ice, the ship may be manoeuvred to attempt recovery of the RPA, which may be accomplished by grappling or, if conditions permit and it is deemed safe, by use of a personnel cage and crane, or direct egress from the ship onto the ice.

9.8 Wildlife

1. RPA must not operate (including landing or taking off) closer than 200 m (laterally) of static wildlife concentrations unless closer approaches are specifically authorised by a permit (e.g. environmental approval as part of an ASAC approved science project).
2. Dynamic wildlife, in particular birds on the wing, present a special case. RPA operations should be aborted if birds present a significant risk of collision (e.g., a skua attacking the RPA).

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3. RPA operations must stop immediately if wildlife is exhibiting signs of disturbance.
 4. Note: The AAD may apply conditions with increased distances in situations where a species, wildlife colony or other factor suggests an increased separation distance is required to avoid wildlife disturbance.

9.9 Emergency Response Onboard

1. As a general statement, emergency response is handled by the ship's crew.
2. In the event of a crash on vessel decks, personnel must provide first aid to any injured parties (where safe to do so) and must safely neutralise any ongoing threat from the RPA (e.g., spinning propellers and unstable LiPo batteries), in accordance with vessel procedures.
3. Administrative reporting requirements must be completed in accordance with Operations Manual Volume 5A (refer to the accident/incident reporting section).

10 Post-deployment

1. The RPA team must complete post-flight checklists for the RPA and batteries and must complete data acquisition and log sheets.
2. All data associated with DCCEEW RPA activities must be entered into the DCCEEW AVCRM online compliance and risk management system.
3. A RORA debrief must be completed with the authorising officer.

11 Post-voyage Report

The RPA team must prepare a report on all aspects of the RPA operations, including updates or feedback in relation to this SOP.